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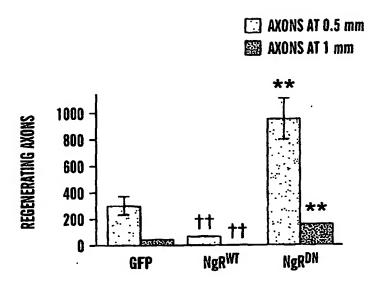


FIG. 1A

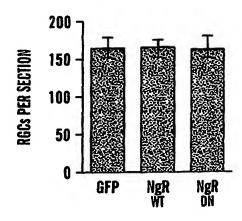


FIG. 1B

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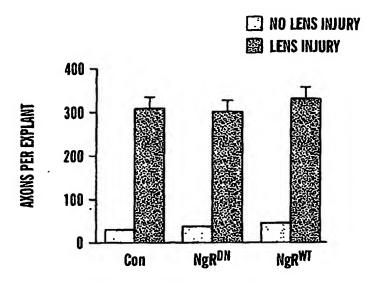


FIG. 2A

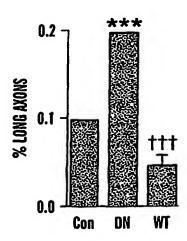


FIG. 2B

**SUBSTITUTE SHEET (RULE 26)** 

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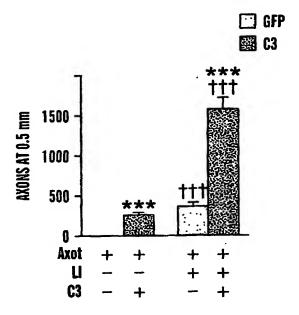


FIG. 3A

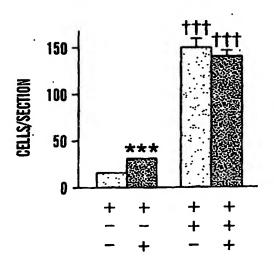


FIG. 3B

**SUBSTITUTE SHEET (RULE 26)** 

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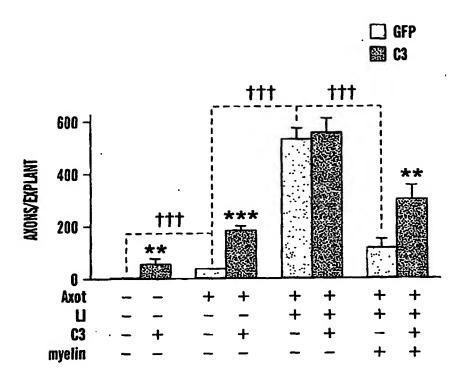


FIG. 4

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Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu Gly

His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu 20 25 30

Leu Val Gln Lys Tyr Ser Asn Ser SEQ ID NO:1

Ile Gln Lys Ser Asp Glu Gly His Pro Phe Arg Ala Tyr Leu Glu Ser 1 5 10 15

Glu Val Ala Ile Ser Glu Glu Leu Val SEQ ID NO:2

Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu Leu Val Gln
1 5 10 15

Lys Tyr Ser Asn Ser Ala Leu Gly His SEQ ID NO:3

Ser Glu Glu Leu Val Gln Lys Tyr Ser Asn Ser Ala Leu Gly His Val 1 5 10 15

Asn Cys Thr Ile Lys Glu Leu Arg Arg SEQ ID NO:4

Ala Leu Gly His Val Asn Cys Thr Ile Lys Glu Leu Arg Arg Leu Phe 1 5 10 15

Leu Val Asp Asp Leu Val Asp Ser Leu SEQ ID NO:5

Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu Gly 1 5 10 15

His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu 20 25 30

Leu Val Gln Lys Tyr Ser Asn Ser SEQ ID NO:6

Phe Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu
1 5 10 15

Gly His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu 20 25 30

Glu Leu Val Gln Lys Tyr Ser Asn Ser Ala Leu Gly His Val Asn Cys

Thr Ile Lys Glu Leu Arg Arg Leu Phe Leu Val Asp Asp Leu Val Asp 50 55 60

Ser Leu SEQ ID NO:7

# FIG. 5

#### SUBSTITUTE SHEET (RULE 26)

Wet Lys Arg Ala Ser Ala Gly Gly Ser Arg Leu Leu Ala Trp Val Leu Frp Leu Gln Ala Trp Gln Val Ala Ala Pro Cys Pro Gly Ala Cys Val Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu 31n Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala Arg Ile Asp Ala Ala Phe Thr Gly Leu Ala Leu Leu Glu Gln Leu Asp Leu 100 105 110 Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe His Gly Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr 145 150 150 Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Ser Ser 180 /al Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu 195 205 Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe Arg Asp 210 Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Ala 230 235 240 Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr Leu Arg 255 eu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp ila Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Ser eu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Asn 290 usp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro Ile Trp thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys Cys Cys 335 iln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly Arg Pro la Ser Ala Gly Asn Ala Leu Lys Gly Arg Val Pro Pro Gly Asp Ser ro Pro Gly Asn Gly Ser Gly Pro Arg His Ile Asn Asp Ser Pro Phe ily Thr Leu Pro Gly Ser Ala Glu Pro Pro Leu Thr Ala Val Arg Pro 85 395 the Gly Ser Glu Pro Pro Gly Phe Pro Thr Ser Gly Pro Arg Arg 415 'ro Gly Cys Ser Arg Lys Asn Arg Thr Arg Ser His Cys Arg Leu Gly Iln Ala Gly Ser Gly Gly Gly Thr Gly Asp Ser Glu Gly Ser Gly 445 la Leu Pro Ser Leu Thr Cys Ser Leu Thr Pro Leu Gly Leu Ala Leu 450 460 al Leu Trp Thr Val Leu Gly Pro Cys SEQ ID NO:8

7/12 Met Lys Arg Ala Ser Ser Gly Gly Ser Arg Leu Leu Ala Trp Val Leu Trp Leu Gln Ala Trp Arg Val Ala Thr Pro Cys Pro Gly Ala Cys Val Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu Gln Ala Val Pro Thr Gly Ile Pro Ala Ser Ser Gln Arg Ile Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Gln Ser Cys 65 75 80 Arg Asn Leu Thr lle Leu Trp Leu His Ser Asn Ala Leu Ala Arg Ile Asp Ala Ala Phe Thr Gly Leu Thr Leu Leu Glu Gln Leu Asp Leu 100 110 Ser Asp Asn Ala Gln Leu His Val Val Asp Pro Thr Thr Phe His Gly Leu Gly His Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Arg Glu 130 Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr 145 Leu Gln Asp Asn Asn Leu Gln Ala Leu Pro Asp Asn Thr Phe Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Pro Ser Val Pro Glu His Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu 195 205 Leu His Gln Asn His Val Ala Arg Val His Pro His Ala Phe Arg Asp 210 220 Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Met 225 230 235 Leu Pro Ala Glu Val Leu Met Pro Leu Arg Ser Leu Gln Tyr Leu Arg Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Asn 285 Leu Pro Gln Arg Leu Ala Asp Arg Asp Leu Lys Arg Leu Ala Ala Ser 290 300 Asp Leu Glu Gly Cys Ala Val Ala Ser Gly Pro Phe Arg Pro Ile Gln 305 Thr Ser Gln Leu Thr Asp Glu Glu Leu Leu Ser Leu Pro Lys Cys Cys 325 Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly Arg Pro Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg Val Pro Pro Gly Asp Thr 355 Pro Pro Gly Asn Gly Ser Gly Pro Arg His Ile Asn Asp Ser Pro Phe 370 Gly Thr Leu Pro Ser Ser Ala Glu Pro Pro Leu Thr Ala Leu Arg Pro 385 390 400 Gly Gly Ser Glu Pro Pro Gly Leu Pro Thr Thr Gly Pro Arg Arg 415 Pro Gly Cys Ser Arg Lys Asn Arg Thr Arg Ser His Cys Arg Leu Gly Gln Ala Gly Ser Gly Ala Ser Gly Thr Gly Asp Ala Glu Gly Ser Gly 445 Ala Leu Pro Ala Leu Ala Cys Ser Leu Ala Pro Leu Gly Leu Ala Leu 450 Val Leu Trp Thr Val Leu Gly Pro Cys SEQ ID NO:9

#### **FIG.** 8 8/12

Met Lys Arg Ala Ser Ala Gly Gly Ser Arg Leu Leu Ala Trp Val Leu Trp Leu Gln Ala Trp Gln Val Ala Ala Pro Cys Pro Gly Ala Cys Val . 25 Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala Arg Ile Asp Ala Ala Phe Thr Gly Leu Ala Leu Leu Glu Gln Leu Asp Leu 105 Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe His Gly 120 Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu 135 Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe Arg Asp 170 Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Ser Ser 185 180 190 Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu 200 Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Ala 230 235 Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr Leu Arg 250 Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Ser 280 Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Asn 295 Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro Ile Trp Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys Cys Cys 330 325 Gln Pro Asp Ala Ala Asp Lys Ala SEQ ID NO: 10 (Human 1-344)

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## FIG. 8 (cont'd.) 9/12

Met Lys Arg Ala Ser Ala Gly Gly Ser Arg Leu Leu Ala Trp Val Leu Trp Leu Gln Ala Trp Gln Val Ala Ala Pro Cys Pro Gly Ala Cys Val Cys Tyr Asn Glu. Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala Arg Ile Asp Ala Ala Phe Thr Gly Leu Ala Leu Leu Glu Gln Leu Asp Leu 105 Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe His Gly 120 Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu 135 Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr 155 Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe Arg Asp 170 Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Ser Ser Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Ala 235 Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr Leu Arg Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp 265 Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Ser 280 Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Asn 295 300 Asp Leu Gln Gly Cys Ala SEQ ID NO: 11 (Human 1-310) 310

### FIG. 8 (cont'd.) 10/12

Met Lys Arg Ala Ser Ser Gly Gly Ser Arg Leu Pro Thr Trp Val Leu
1 10 15 Trp Leu Gln Ala Trp Arg Val Ala Thr Pro Cys Pro Gly Ala Cys Val Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Arg Pro Gln Gln Gly Leu Gln Ala Val Pro Ala Gly Ile Pro Ala Ser Ser Gln Arg Ile Phe Leu
50 60 His Gly Asn Arg Ile Ser Tyr Val Pro Ala Ala Ser Phe Gln Ser Cys
65 70 75 80 Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Ala Leu Ala Gly Ile Asp Ala Ala Ala Phe Thr Gly Leu Thr Leu Leu Glu Gln Leu Asp Leu 105 Ser Asp Asn Ala Gln Leu Arg Val Val Asp Pro Thr Thr Phe Arg Gly 120 Leu Gly His Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu 130 135 140 Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr Leu Gln Asp Asn Asn Leu Gln Ala Leu Pro Asp Asn Thr Phe Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Pro Ser Val Pro Glu His Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu 195 200 205 Leu His Gln Asn His Val Ala Arg Val His Pro His Ala Phe Arg Asp 215 Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Met 235 Leu Pro Ala Glu Val Leu Val Pro Leu Arg Ser Leu Gln Tyr Leu Arg 245 250 255 Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp
, 260 265 270 Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Gly Val Pro Ser Asn 275 280 285 Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Thr Ser 290 295 300 Asp Leu Glu Gly Cys Ala Val Ala Ser Gly Pro Phe Arg Pro Phe Gln Thr Asn Gln Leu Thr Asp Glu Glu Leu Leu Gly Leu Pro Lys Cys 325 330 335 330 Gln Pro Asp Ala Ala Asp Lys Ala SEQ ID NO: 12 (Rat 1-344)

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FIG. 8 (cont'd.) 11/12 Met Lys Arg Ala Ser Ser Gly Gly Ser Arg Leu Pro Thr Trp Val Leu Trp Leu Gln Ala Trp Arg Val Ala Thr Pro Cys Pro Gly Ala Cys Val Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Arg Pro Gln Gln Gly Leu Gln Ala Val Pro Ala Gly Ile Pro Ala Ser Ser Gln Arg Ile Phe Leu His Gly Asn Arg Ile Ser Tyr Val Pro Ala Ala Ser Phe Gln Ser Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Ala Leu Ala Gly Ile Asp Ala Ala Ala Phe Thr Gly Leu Thr Leu Leu Glu Gln Leu Asp Leu Ser Asp Asn Ala Gln Leu Arg Val Val Asp Pro Thr Thr Phe Arg Gly Leu Gly His Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr Leu Gln Asp Asn Asn Leu Gln Ala Leu Pro Asp Asn Thr Phe Arg Asp 170 Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Pro Ser 185 Val Pro Glu His Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu 195 200 Leu His Gln Asn His Val Ala Arg Val His Pro His Ala Phe Arg Asp 215 210 Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Met 235 230 Leu Pro Ala Glu Val Leu Val Pro Leu Arg Ser Leu Gln Tyr Leu Arg 245 Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp 265 Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Gly Val Pro Ser Asn 275 Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Thr Ser 295 Asp Leu Glu Gly Cys Ala SEQ ID NO: 13 (Rat 1-310)

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Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu Gly 15

His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu 20

Leu Val Gln Lys Tyr Ser Asn Ser Ala Leu Gly His Val Asn Cys Thr 35

Ile Lys Glu Leu Arg Arg Leu Phe Leu Val Asp Asp Leu Val Asp Ser 50

Leu Lys SEQ ID NO:14

Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu Gly 15

His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu 20

Leu Val Gln Lys Tyr Ser Asn Ser 40

SEQ ID NO:15

Arg Ile Tyr Lys Gly Val Ile Gln Lys Ser Asp Glu Gly His Pro Phe
1 5 10 15

Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu Leu Val Gln
20 25 30

Lys Tyr Ser Asn Ser SEQ ID NO::

## FIG. 9

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